Bangalore Electricity Supply Company Limited

(Wholly owned by Government of Karnataka Undertaking)

DETAILED SPECIFICATIONS OF MANUAL TELESCOPIC TREE PRUNER:

1. SCOPE

This technical specification covers design, manufacture, testing, inspection and supply of Telescopic Tree Pruner as per IS:10684-1983 suitable for clearing Tree branches obstructing the Electrical lines without climbing the tree.

2 GROSS WEIGHT: Less than 3Kg.

3. LENGTH: Length of the Rod plus Blade shall be minimum 6.5m.

4. BLADE MATERIAL: Impulse hardened (Stainless Steel) blade for extended service life and the blade shall be foldable for easy & safe transportation. The head of the blade shall have a hooked tip useful for cutting twigs. Saw blade shall be fixed with screw and nut for a secure grip. The blade of the tree pruner shall be manufactured from carbon steel or alloy steel.

The chemical composition of the carbon steel shall be as follows:

a) Carbon 0.7 to 0.9 percent;
b) Silicon 0.1 to 0.4 percent;
c) Manganese 0.5 to 1.0 percent;
d) Sulphur 0.05 percent, Max; and
e) Phosphorus 0.05 percent; Max.

5. HARDNESS OF BLADE

The blade shall be heat treated to have a hardness of 425 to 450 HB (IS: 1500-1968) or equivalent Rockwell or Vickers hardness numbers.

6. SIZE OF THE BLADE: 15” to 16”.

7. THICKNESS OF THE BLADE: 1.0 mm to 1.5mm.

8. OTHER REQUIREMENTS

1. The blade of the pruner shall be suitably forged to shape and shall be annealed.
2. The blade shall be fitted in the body and shall be foldable with suitable mechanism such that the Tree Pruner shall have Mechanical robustness, withstand cutting force and shall have durable for repeated field usage.
3. In the closed position the cutting edge of the blade shall remain inside the body and shall not protrude.
4. A circular ring shall be provided for tying the rope with the pruner.
5. A hole shall be provided for proper fixing up of the handle with the socket of the body

9. TYPE OF ROD:

Light weight Telescopic Tubular Pole extendable independently in two stages having FRP or Aluminium material insulation shall be provided in case aluminium material is used and shall have a better handling grip.

10. CIRCUMFERENCE OF THE ROD: 110mm to 120mm.

11. TEST

1. The pruner shall be tested by cutting not less than 20 samples of grafts, not exceeding 12 mm in diameter of trees. The cut on the bark shall be clean.
2. The spring shall meet the tests given in 6.5.1 to 6.5.4 of IS : 10134-1982

12. WORKMANSHIP AND FINISH

1. The cutting surface of the blade shall be ground in a direction, preferably, at right angle to the cutting edge. The blade shall be puffed to give a fine finish. The cutting edge shall be sharp enough to immediate use. All the sharp edges except cutting edge shall be rounded off.
2. The blade shall be free from cracks, seams, pits, burrs and other visual defects.
3. The blade of the pruner shall be smeard with suitable mineral jelly as a rust-preventive treatment.
4. The complete body of the pruner shall be painted wherever necessary.

13. INSPECTION

The material for inspection shall be offered by the supplier only under packed condition. The BESCOM shall select samples at random from the packed lot for carrying out acceptance tests

1. Dimensional verification
2. Marking verifications as specification

14. MARKING AND PACKING

The following particulars shall be stamped on the body of the pruner:

a) Manufacturer's name or trade-mark
b) Size and Type of Pruner
c) Batch or code number.
d) Month and year of manufacture
e) Property of "BESCOM".

15.DESPATCH:

The Supplier shall commence only after the sample is approved. Further the manual containing operation, maintenance of the equipment/components shall be supplied along with packing.

16.PACKING & FORWARDING:

The equipment shall be packed suitably. The supplier is responsible for any damage to the equipment due to improper and inadequate packing. The contractor without any extra cost shall supply any material found short without any extra cost.

Sd/-

General Manager (El.)
Quality Standards and Safety,